



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

JAN - 6 1999

Mr. Olivier Lapierre
Logistics-Transport-Customs Department
Matra Marconi Space France
31, Avenue des Cosmonautes
31402 Toulouse Cedex 4
France

Ref. No. 98-0359

Dear Mr. Lapierre:

Your facsimile transmission dated November 18, 1998, to the Office of Civil Aviation Security, Federal Aviation Administration, has been referred to this office for reply. You ask about international shipping requirements for an atomic clock that contains 2 grams (0.07 ounce) of cesium in a vacuum metal container.

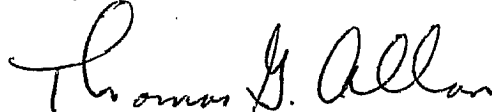
The International Air Transport Association's (IATA) Dangerous Goods Regulations do not have official standing under the U.S. Hazardous Materials Regulations (HMR; 49 CFR 171-180). The regulations recognized by the HMR and authorized in 49 CFR 171.11 as an alternative to compliance with 49 CFR requirements are the International Civil Aviation Organization's (ICAO) Technical Instructions.

Neither the ICAO Technical Instructions nor the HMR provide limited quantity packaging exceptions for cesium. All shipments of cesium, no matter how small, must be packaged in UN or DOT specification packaging that is properly marked as such. Section 173.211 of the HMR specifies the packaging requirements for non-bulk shipments of Packing Group I hazardous materials. For combination packagings, this section provides that Packing Group I hazardous materials such as cesium may be packaged in a metal receptacle contained inside an authorized outside packaging such as a 4A steel box or a 4D plywood box. The outside packaging must be marked in accordance with § 178.3 of the HMR.

You may wish to consider seeking an approval for your shipment under § 173.4 of the HMR. This section authorizes small quantity exceptions for certain classes of hazardous materials. Paragraph (c) permits packages of Division 4.3., Packing Group I materials that conform to the quantity and packaging requirements listed in paragraphs (a)(1) through (a)(10) of § 173.4 to be offered for transportation if specifically approved by the Associate Administrator for Hazardous Materials Safety. Enclosed is a sheet outlining in plain language the procedures necessary for RSPA's Associate Administrator to grant an approval.

I hope this information is helpful. If you have further questions, please do not hesitate to contact this office.

Sincerely,

A handwritten signature in cursive script that reads "Thomas G. Allan". The signature is written in dark ink and is positioned above the printed name.

Thomas G. Allan

Senior Transportation Regulations Specialist
Office of Hazardous Materials Standards

Enclosure

Required Information for Requesting for an Approval under 49 CFR
Subpart H - Approvals, Registrations and Submissions

1. Must be sent to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Admin., U.S. Department of Transportation, 400 7th Street, SW., Washington, D.C., 20590-0001, Attention: DHM-32.
2. Identify Section of the Regulations for which approval or registration is being made.
3. If required by the Regulations, a lab report, safety data report, etc.
4. Name, street, city, state and telephone number of person on whose behalf the application is being made.
5. If applicant is not a resident of U.S., designation of agent for service in accordance with 49 CFR 107.7.
6. Description of activity for which approval/registration is required.
 - a. The proposed duration of the approval/registration.
 - b. The transport mode or modes affected, as applicable.
 - c. Any additional information specified in the section , as applicable.
7. For an approval that provides exceptions from regulatory requirements or prohibitions:
 - a. Identification of increased risk of safety or property that may result if the approval is granted.
 - b. Specification of the measures that the applicant considers necessary or appropriate to address risk.
 - c. Substantiation, with appropriate analyses, evaluations costs, etc.
 - d. Demonstration that proposed activity will achieve a level of safety that is at least equal to that required by the Regulations.
 - e. A comparison of what the Regulations require vs. what is being proposed.

98-0359

AC0-800
AC01-98-0477

TELECOPIE/FAX

MATRA MARCONI SPACEGORSKY
\$ 172.2101

Cesium

De/From : Olivier LAPIERRE Logistics-Transport-Customs Department Tél. : (33) 5 62 19 57 40 Fax : (33) 5 62 19 78 00	A / To: Federal Aviation Administration Company: Office of Civil Aviation Security Hazardous Materials Program Fax: 1 202 267 8496
Référence : Date : 1998-11-18	Copies :
Cet envoi comprend (ce nombre inclut cette page) 1 pages This facsimile consists of (this number includes this page) 1 pages	Si vous n'avez pas reçu clairement cet envoi, veuillez nous contacter par téléphone au : If you don't receive legible copies of all pages, please telephone immediately : 33 5 62 19 57 40

OBJET / SUBJECT : INFORMATION CONCERNING CAESIUM (SECOND MAILING)

Dear Sir,

Working in the Logistics-Transport-Customs Dpt of Matra Marconi Space France, we will have to send by air cargo to Cap Kennedy, Fl. an « atomic clock » which contains 2 grams (0.07 ounce) of caesium (UN 1407, Cl. 4.3, Packing Group. I). This experiment will be flown on the Shuttle in the frame of the ISS (International Space Station). Even if this transport is only planned for 2001, we need to have some in advance informations in order to prepare container specifications and transport plannings.

The « atomic clock » is a vacuum metal container where the caesium is fixed in with other optical equipments. This container is watertight and will be transported in a specific metal container which will be also watertight and built for aircraft and truck transports.

According to the IATA, we need to get a IP3 inner packaging and a 4A exterior packaging (Packing instruction 412) but in this particular case, will it be compulsory to provide such packagings with the UN stamp for this specific equipment which contains only 2 grams of cesium ?

We would like to have your point of vue and your instructions on this matter in order to have a solution in perfect accordance with the IATA and the US and French Offices of Civil Aviation Security.

Being at your disposal should you require further information,

thank you in advance for your response.

Best regards

Olivier Lapiere

Logistics-Transport-Customs buyer

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